

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Currently amended) A steel processing material for addition into a heat of steel in an electric arc furnace comprising:

(a) from about 5% to about 30% of a dried post combustion material recycled from the drop out box of an electric arc furnace, wherein the dried post combustion material comprises from about 20% to about 75% by weight iron and less than up to about 6.7% 5% by weight of zinc-oxide other metals and metal oxides; and

(b) a slag foaming material.

Claim 2. (Original) The steel processing material of claim 1 wherein the slag foaming material comprises about 90% coal and about 10% dolomitic stone.

Claim 3. (Canceled)

Claim 4. (Previously presented) The steel processing material of claim 1 wherein the dried post combustion material comprises less than about 2% water.

Claim 5. (Previously presented) The steel processing material of claim 1 wherein the dried post combustion material is of an injectable particle size, having an average particle size sufficiently small to allow injection of the post combustion material into the heat of steel.

Claim 6. (Previously presented) The steel processing material of claim 1 wherein the dried post combustion material has maximum particle not greater than about 5/16 of an inch.

Claim 7. (Currently amended) The steel processing material of claim 1 wherein the

dried post combustion material comprises about 30% to about 55% ~~Fe~~ iron.

Claims 8-25. (Canceled)

Claim 26. (Currently amended) A steel processing material, at least partially recycled from an electric arc furnace, comprising:

(a) a post combustion material having less than 2% moisture by weight and recycled from the drop out box of an electric arc furnace, wherein the post combustion material comprises from about 20% to about 75% by weight of iron and less than up to about 6.7% 5% by weight of zinc-oxide other metals and metal oxides; and

(b) a slag foaming material,

wherein the steel processing material is operable to contribute to the foaming of slag when added to a heat of steel in an electric arc furnace and to react with the heat to recover iron from the post combustion material to the heat, and further wherein less than about 1% by weight of the total iron in the heat being recovered is iron.

Claims 27-29. (Canceled)

Claim 30. (Currently amended) A steel processing material for addition into a heat of steel in an electric arc furnace comprising:

(a) from about 5% to about 30% of a dried post combustion material recycled from the drop out box of an electric arc furnace, wherein the dried post combustion material comprises from about 20% to about 75% iron and less than up to about 6.7% 5% by weight of zinc-oxide other metals and metal oxides, and

(b) a slag foaming material;

wherein the recovery of iron from the steel processing material is only a portion of the iron in

Serial No. 09/909,487
Amendment dated November 3, 2006
Reply to Official Action of May 3, 2006

the heat.

Claims 31-32. (Canceled)